

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A method for controlling odor associated with deposits
of organic material which can cause odors on surfaces, the
method comprising applying to the surface a composition
comprising one or more adhering agents and a preparation of
dormant bacteria, which when activated are effective to
control odors, the dormant bacterial preparation being
allowed to become associated with surface such that when
the surface is subsequently exposed to organic material
which can cause odors, the bacteria are capable of becoming
active and digesting the organic material.
2. A method as claimed in claim 1 wherein the dormant
bacteria are sporulated forms of one or more strains
selected from the bacterial genera Bacillus.
3. A method as claimed in claim 1 wherein the dormant
bacteria are sporulated forms of one or more strains
selected from the group of bacterial species consisting
essentially of Bacillus megaterium, Bacillus pasteurii,
Bacillus laevolacticus and Bacillus amyloliquefaciens.
4. A method as claimed in claim 3 wherein the dormant
bacteria are applied to the surface at a concentration of
between about 10^6 and about 10^8 cells per square inch of
surface.
5. A method as claimed in claim 4 wherein the dormant
bacteria are applied to the carpet at a concentration of
about 10^7 cells per square inch of surface.

6. A method as claimed in claim 3 wherein the dormant bacterial preparation comprises:

	<u>% of total bacteria</u>
5 <u>Species</u>	<u>Range</u>
<u>Bacillus megaterium</u>	5-60
<u>Bacillus pasteurii</u>	10-40
<u>Bacillus laevolacticus</u>	10-40
<u>Bacillus amyloliquefaciens</u>	10-40

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7. A method as claimed in claim 3 wherein the dormant bacterial preparation comprises:

	<u>% of total bacteria</u>
<u>Species</u>	
15 <u>Bacillus megaterium</u>	40
<u>Bacillus pasteurii</u>	20
<u>Bacillus laevolacticus</u>	20
<u>Bacillus amyloliquefaciens</u>	20

20 8. A method as claimed in claim 3 wherein the one or more
adhering agents are one or more anti-soiling
fluorochemicals or stain-blocking chemicals.

9. A method as claimed in claim 8 wherein the one or more
25 stain-blocking chemicals are selected from the group
consisting of sulfonated phenol formaldehyde condensate
polymer, sulfonated naphthol formaldehyde condensate
polymer, and hydrolyzed vinyl aromatic maleic anhydride
polymer.

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10. A method as claimed in claim 8 wherein the one or more adhering agents are one or more anti-soiling fluorochemicals.

35 11. A method as claimed in claim 1 wherein the bacterial preparation further includes one or more odor neutralizing or trapping agents selected from sodium bicarbonate and molecular sieves.

12. An aqueous odor controlling bacterial composition for
surfaces to impart odor control to the surface, the
composition comprising one or more adhering agents and an
5 effective amount of dormant odor controlling bacteria.

13. An aqueous odor controlling bacterial composition as
claimed in claim 12 wherein the dormant bacteria are one or
more strains selected from the group of bacterial genera
10 consisting of Bacillus, Enterobacter, Streptococcus,
Nitrosomonas, Nitrobacter, Pseudomonas, Alcaligenes and
Klebsiella.

14. An aqueous odor controlling bacterial composition as
15 claimed in claim 13 wherein the dormant bacteria are one or
more strains selected from the group of bacterial species
consisting essentially of Bacillus megaterium Bacillus
pasteurii, Bacillus laevolacticus and Bacillus
amyloliquefaciens.

15. An aqueous odor controlling bacterial composition as
claimed in claim 14 wherein the dormant bacteria are for
application to the surface at a concentration of between
about 10⁶ and about 10⁸ cells per square inch of surface.

16. An aqueous odor controlling bacterial composition as
claimed in claim 14 wherein the dormant bacterial
preparation comprises:

	<u>% of total bacteria</u>	
30	<u>Species</u>	<u>Range</u>
	<u>Bacillus megaterium</u>	5-60
	<u>Bacillus pasteurii</u>	10-40
	<u>Bacillus laevolacticus</u>	10-40
	<u>Bacillus amyloliquefaciens</u>	10-40

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22. A carpet as claimed in claim 21 wherein the bacteria are one or more strains selected from the group of bacterial genera Bacillus.

- 5 23. A carpet as claimed in claim 22 wherein the bacteria are one or more strains selected from the group of bacterial species consisting essentially of Bacillus megaterium, Bacillus pasteurii, Bacillus laevolacticus and Bacillus amyloliquefaciens.

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24. A carpet as claimed in claim 23 wherein the dormant bacteria are applied to the carpet at a concentration of between about 10⁶ and about 10⁸ cells per square inch gram of carpet fiber.

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25. A carpet as claimed in claim 24 wherein the dormant bacteria are applied to the carpet at a concentration of about 10⁷ cells per square inch gram of carpet fiber.

- 20 26. A carpet as claimed in claim 25 wherein the dormant bacterial preparation comprises:

% of total bacteria

<u>Species</u>	<u>Range</u>
<u>Bacillus megaterium</u>	5-60
25 <u>Bacillus pasteurii</u>	10-40
<u>Bacillus laevolacticus</u>	10-40
<u>Bacillus amyloliquefaciens</u>	10-40

- 27.. A carpet as claimed in claim 25 wherein the dormant
30 bacterial preparation comprises:

% of total bacteria

<u>Species</u>	
<u>Bacillus megaterium</u>	40
<u>Bacillus pasteurii</u>	20
35 <u>Bacillus laevolacticus</u>	20
<u>Bacillus amyloliquefaciens</u>	20

28. A carpet as claimed in claim 25 wherein the carpet has also been treated with one or more stain-blocking chemicals.

5 29. A carpet as claimed in claim 28 wherein the one or more stain-blocking chemicals are selected from the group consisting of sulfonated phenol formaldehyde condensate polymer, sulfonated naphthol formaldehyde condensate polymer, and hydrolyzed vinyl aromatic maleic anhydride
10 polymer.

30. A carpet as claimed in claim 29 wherein the preparation contains an amount of the stain blocker to result in a treatment rate of the carpet of about 0.1 wt% to about 20
15 wt% based upon the weight of the carpet fiber.

31. A carpet as claimed in claim 30 wherein the treatment rate is from about 0.25 wt% to about 20 wt%.

20 32. A carpet as claimed in claim 31 wherein the carpet has also been treated with one or more anti-soil fluorochemicals.